REMARKS

This paper responds to the Final Office Action dated June 21, 2005. Applicants hereby request reconsideration of the objections/rejections set forth in the Office Action in view of these remarks. The rejections set forth therein are traversed.

In maintaining the 35 U.S.C. § 103 rejections over Markarios in view of Beser, the Office Action sets forth five substantive responses to the arguments presented in the prior Amendment, which are set forth in paragraphs 2-6 of the Final Office Action.

Regarding paragraph 2 of the Office Action, the Examiner argues that the "coordination manager" is met by "a coordination entity configured to provide storage location information of a tuple stored on a first server to a second server over the computer network in response to a request for the storage location information of the tuple", relying on column 5, lines 1-12 of Makarios. As demonstrated in the prior Amendment, however, the Examiner's column and line citation of Makarios does not appear to be at all relevant. The basis of the rejection, therefore, is faulty and thus should be withdrawn.

Applicants previously argued that even if Makarios does provide for "requests for storage location information," it does not provide for the claimed "receiving user initiated communication requests." In fact, after careful scrutiny of the Makarios reference it is submitted that the term "coordination entity" does not appear anywhere, nor does the term "storage location". The reliance placed on Makarious by the Office Action for this teaching is misplaced, and thus the rejection is faulty.

Regarding paragraph 3 of the Office Action, it is stated that "Examiner points out that none of the alleged features are reflected in claims 1-4". This is incorrect. Each of the following features is reflected in claims 1-4: "virtual network communication system", "at least one private

tuple space within each of said sites for effecting intra-site communications between agents at each of said sites", "coordination manager", "receiving user initiated communication requests", "embed messages from...user agents in secure tuples and exchange said secure tuples over [the] Shared Tuple Space". Thus, the prior argumentation provided which relies upon these claim limitations is valid and supportable.

Regarding paragraph 4 of the Office Action, which states "Examiner points out that none of the alleged features are reflected in claims 5-9". With one exception, the Examiner's statement is incorrect. Each of the following features is reflected in claims 5-9: "virtual network communications", "shared tuple space" and "managing instances of Coordinators at each of [the] different sites for embedding [the] messages in secure tuples over a Shared Tuple Space between said different sites". However, on review it is noted that the "coordinator manager" is not reflected in claims 5-9. Page 7, lines 16 and 17 of the prior response should have read: "Furthermore, the "managing instances of coordinators at each of said different sites" of claim 6 is not taught as suggested by the references as explained above".

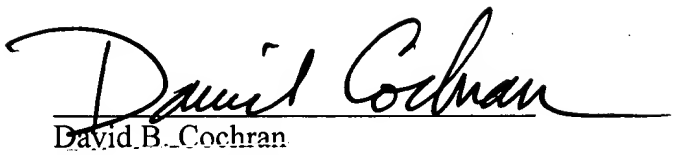
Regarding paragraph 5 of the Office Action, the Examiner refutes the argument that the obviousness rejection is improper because the references cited are from non-analogous art. In so doing, the Examiner notes that it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. In this case, the Examiner notes that Makarios discloses a tuple spaced-based coordination mechanism providing an information space constructed to span a group of one or more server systems. The Examiner states that a "coordination entity manages storage of tuples within the information space". As indicated above, however, the term "coordination entity" does

not appear anywhere in the Makarios reference. This is not surprising since Makarios is directed to modeling tuple space interactions using XML (instead of Java objects), for greater inter-operability between disparate networks.

By way of contrast, the "particular problem with which the applicant was concerned" is "effecting secure communications between user agents at different sites within [the] virtual network", as clearly recited in the Preambles of independent claims 1 and 6. Applicant's claims are directed specifically to the "particular problem" of effecting secure communications between user agents in a virtual network. The Makarios reference is not concerned whatsoever with security issues. Accordingly, applicants maintain that the obviousness rejection is improper because the references cited are from non-analogous art. The Besser and Brickell et al. references are directed, in the most general terms, to secure communications. Besser discloses secure cable modem communications, while Brickell et al. discloses a secure teleconferencing system. Neither of these secondary references address applicant's particular problem of communications between user agents in a virtual network. Moreover, there is no suggestion in Makarios to adapt the secure cable modem communications of Besser or the secure teleconferencing system of Brickell et al. to an XML-based tuple space. Indeed, were there such a suggestion, it is submitted that any combination of the tuple space system of Makarios with the cable modem of Besser or the secure teleconferencing system of Brickell et al. would be entirely unworkable because the communication infrastructures of such systems are entirely different.

Applicants respectfully request that the Examiner reconsider the rejections over Makarious and Besser set forth in the Final Office Action in view of these remarks.

Respectfully submitted,



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